

IN THE SPECIFICATION

The following paragraphs have been amended to correct the minor informalities noted by the Examiner. No new matter has been added.

✓ Please replace the paragraph beginning on line 19 of page 12 of the specification with the rewritten paragraph appearing below.

A1
The resolution at which the control value may be set or adjusted dictates the tuning resolution of the overall system, which, in the radio head 26, includes the PLL module 62 and the radio transceiver 52 and associated frequency synthesizer 54. Assuming the VCO 74 has an output frequency of 24.576 MHz as earlier introduced, the ± 0.08 PPM frequency accuracy translates into an allowable VCO frequency error of ± 1.966 Hz ($24.576 * 0.08$). The VCO 74 is controlled by the DAC 72, which, in turn, is set by the filtered phase deviation (PD). Thus, the resolution of the DAC 72 and the PD count together determine how accurately the VCO 74 can be controlled. Assuming a 12-bit DAC (i.e., 4096 levels) at 1 mV per DAC count, each DAC count is ~~0.00586~~ 0.006 PPM ($24.576/4096$).

✓ Please replace the paragraph beginning on line 4 of page 13 of the specification with the rewritten paragraph appearing below.

A2
This translates into ~~0.144~~ 0.147 Hz per DAC count (~~$24.5476 * 0.00586$~~ ($24.576 * 0.006$)). Thus, the ± 1.966 Hz VCO frequency requirement translates into ± 13 DAC counts (control value counts). With each PD count equating to a frequency error of 4 Hz, the PD value provided to the loop filter 68 represents a coarse error signal with respect to the required control accuracy and represents a chief need for basing control on the filtered control values output by the loop filter 68.

✓ Please replace the paragraph beginning on line 9 of page 27 of the specification with the rewritten paragraph appearing below.

AB If the peak processing has not run over an adequate interval (block 416), processing continues with resetting the estCount and estSum variables (block 422). If at least one positive or negative peak has occurred, which may be determined by evaluating the posCount and negCount variables (block 424), results from the preceding half cycle are accumulated using the last CV_{AVG} value to update the estSum variable (block 426), with the estCount value also being incremented. Processing then ends with a false value being returned to the calling process (block 428).
